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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,685	02/19/2004	Akihiko Emori	62807-154	2001

7590 08/31/2004

McDermott, Will & Emery
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER	
TIBBITS, PIA FLORENCE	

ART UNIT	PAPER NUMBER
2838	

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/780,685	EMORI ET AL.	
	Examiner	Art Unit	
	Pia F Tibbits	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-41* is/are pending in the application.

4a) Of the above claim(s) *32-41* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/083,645.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is in answer to the election filed 8/9/2004. Applicant's election of Group I, claims 11-31, is acknowledged. However, Applicant is silent regarding whether the election is made with or without traverse. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse. **MPEP 818.03** (a) states that "As shown by the first sentence of 37 CFR 1.143, the traverse to a requirement must be complete as required by 37 CFR 1.111(b) which reads in part: "In order to be entitled to reconsideration or further examination, the applicant or patent owner must reply to the Office action. The reply by the applicant or patent owner must be reduced to a writing which distinctly and specifically points out the supposed errors in the examiner's action and must reply to every ground of objection and rejection in the prior Office action. The applicant's or patent owner's reply must appear throughout to be a bona fide attempt to advance the application or the reexamination proceeding to final action."

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 11-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. **6680600** in view of **Emori et al.** [hereinafter Emori][6430066].

U.S. Patent No. **6680600** and the instant application both describe a power supply unit comprising: at least one storage battery comprising a plurality of circuits connecting in series, each of the plurality of circuits including a first cell group and a second cell group connected in parallel; wherein said second cell group utilizes an electrolyzable electrolytic solution, or generates recombinable gas; and a charger/discharger for controlling charge/discharge of said storage battery adapted to charge said storage battery up to a voltage at which the electrolytic solution of said second cell group is electrolyzed, or to a voltage at which the generated gas is recombined. U.S. Patent No. 6680600 does not disclose the first cell group including lithium secondary cells or electrical double layer capacitors, and the second cell group including lead cells, nickel hydrogen cells, nickel cadmium cells or fuel cells.

Emori discloses that capacitors are an electric energy storage device such as a nickel hydrogen battery, a lead storage battery, a lithium secondary battery, or an electric double layer capacitor or a generating device such as a fuel battery [column 3, lines 66-67; column 4, lines 1-3]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the cells used by the Prior Art with the electric energy storage devices, disclosed by Emori, to supply power to a circuit because:

a) all are very well known, alternate types of electric energy storage device which will perform the same function, if one is replaced with the other, of supplying power to a circuit, as already suggested by the Prior Art, and

b) the use of this particular type of electric energy storage device to a circuit is considered to be nothing more than the use of one of numerous and well known alternate types of electric energy storage devices that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to supply power to a circuit, as already suggested by the Prior Art.

3. Claims 21-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6747438 in view of **Emori et al.** [hereinafter Emori][6430066].

U.S. Patent No. 6747438 and the instant application both describe a distributed power supply system comprising: a storage battery connecting in series at least two parallel circuits, each of the at least two parallel circuits is formed to connect in parallel a first cell group and a second cell group, said second cell group being capable of electrolysis of the electrolytic solution thereof or recombination of the generated gas thereof; a first power supply unit including a charger/discharger for controlling charge/discharge of said storage battery and adapted to charge said storage battery up to a voltage at which the electrolytic solution of said second cell group is electrolyzed or a voltage at which the generated gas is recombined; and a second power supply unit connected in parallel to said first power supply unit; wherein when said second power supply unit is in power shortage, electric power is supplied from said first power supply unit, and when said second power supply unit is in surplus power, said storage battery of said first power supply unit is charged by the surplus power up to a voltage at which the electrolytic solution of said second cell group is electrolyzed or a voltage at which the generated gas is recombined. U.S. Patent No. 6747438 does not disclose the first cell group including lithium secondary cells or electrical double layer capacitors, and the second cell group including lead cells, nickel hydrogen cells, nickel cadmium cells or fuel cells.

Emori discloses that capacitors are an electric energy storage device such as a nickel hydrogen battery, a lead storage battery, a lithium secondary battery, or an electric double layer capacitor or a generating device such as a fuel battery [column 3, lines 66-67; column 4, lines 1-3]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the cells used by the Prior Art with the electric energy storage devices, disclosed by Emori, to supply power to a circuit because:

a) all are very well known, alternate types of electric energy storage device which will perform the same function, if one is replaced with the other, of supplying power to a circuit, as already suggested by the Prior Art, and

b) the use of this particular type of electric energy storage device to a circuit is considered to be nothing more than the use of one of numerous and well known alternate types of electric energy storage devices that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to supply power to a circuit, as already suggested by the Prior Art.

4. Claims 30 and 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6747438 because they both describe a distributed power supply system comprising: a storage battery connecting in series at least two parallel circuits, each of the at least two parallel circuits is formed to connect in parallel a first cell group and a second cell group, said second cell group being capable of electrolysis of the electrolytic solution thereof or recombination of the generated gas thereof; a first power supply unit including a charger/discharger for controlling charge/discharge of said storage battery and adapted to charge said storage battery up to a voltage at which the electrolytic solution of said second cell group is electrolyzed or a voltage at which the generated gas is recombined; and a second power supply unit connected in parallel to said first power supply unit; wherein when said second power supply unit is in power shortage, electric power is supplied from said first power supply unit, and when said second power supply unit is in surplus power, said storage battery of said first power supply unit is charged by the surplus power up to a voltage at which the electrolytic solution of said second cell group is electrolyzed or a voltage at which the generated gas is recombined.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is (571) 272-2086. If unavailable, contact the Supervisory Patent Examiner Mike Sherry whose telephone number is (571) 272-2084. The Technology Center Fax number is (703) 872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFT

August 28, 2004

Pia Tibbits

Primary Patent Examiner